

In re Patent Application of:  
**JIANG ET AL.**  
Serial No. 09/816,319  
Filed: MARCH 22, 2001

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REMARKS

Claims 9, 10, 25, 26, 84 to 108 and 139 are currently pending. All of the claims have rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6,369,924 (Scharf et al).

Applicant respectfully disagrees with the Examiner's assessment that the Scharf et al reference includes all of the essential elements of the present invention, in particular, that Scharf et al disclose the use of a motherboard within the optical module. According to the description col 4, lines 16 to 18:

*The modules 25 are illustratively mounted on a motherboard or mounting circuit board 22 as will be readily appreciated by those skilled in the art.*

Accordingly, the modules 25 disclosed in the Scharf et al reference do not comprise a motherboard, as in the present invention, rather they are mounted on a motherboard in a host device, as all transceivers are including those of the present invention. The present invention provides a separate motherboard in the module, which can inter alia: 1) separate ground and power planes between receiver and transmitter channels in order to maximize isolation and minimize cross talk; and 2) be used to mount components or circuits for increased functionality within the module without increasing the overall size of the module.

The claims of the application have been amended to overcome the objections of the Examiner and to better define

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the invention in light of the prior art. In particular, claim 84 has been amended to clarify that the module according to the present invention is for mounting on a host PCB, that the module includes a housing for shielding the module, and that the motherboard is coupled to the housing and includes a connector for connecting the module to the host PCB. These features more clearly define the invention as a stand-alone module with all the advantages provided by having a separate motherboard, which is both novel and unobvious.

Claims 85, 89, 94, 99, and 106 have been amended in accordance with the amendments made to claim 84. Claim 139 has been added to ensure all aspects of the invention are protected. This feature is also novel and unobvious in view of Scharf et al.

Furthermore, claims 9, 10, 25 and 26 have been amended to overcome the objections of the Examiner and to better define the invention in light of the prior art. In particular, the claims have been amended to clarify that the ground plane is mounted on the backside of one or both PCB's to reduce EMI and crosstalk between the first and second daughterboards, as illustrated and defined in the specification. The ground planes disclosed in the Scharf et al reference are on the front side of the PCB's, thereby only reducing EMI with the outside, but having no effect on EMI and crosstalk between the first and second daughterboards.

As such, it is respectfully submitted that all of the claims remaining in the application are in condition for

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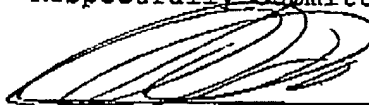
allowance. Early and favorable consideration would be appreciated.

Applicants request confirmation of consideration of the IDS previously filed electronically in the U.S. Patent and Trademark Office on May 14, 2004, and June 21, 2004.

Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 50-1465 and please credit any excess fees to such deposit account.

Respectfully submitted,



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CERTIFICATE OF FACSIMILE TRANSMISSION

I HEREBY CERTIFY that the foregoing correspondence has been forwarded via facsimile number 571-273-8300 to M/S AMENDMENT, COMMISSIONER FOR PATENTS, this 28 day of September 2005.

